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IN THE CLAIMS

1-37. (Cancelled)

38. (Currently Amended) A method of manufacturing zirconia-alumina body, comprising:

mixing yttria stabilized zirconia, with monoclinic phase zirconia, yttria, and alumina with a solvent to form a mixture;

drying said mixture to form a dried mixture;

disposing said dried mixture adjacent to an unfired alumina body; and

co-firing said dried mixture and said unfired alumina body to form a zirconia-alumina body, wherein said zirconia-alumina body comprises about 1 weight% to about 45 weight% monoclinic phase zirconia, based upon a total weight of said zirconia. ~~alumina body.~~

39. (Currently Amended) The method of manufacturing zirconia-alumina body of Claim 38, wherein said zirconia-alumina body comprises about 15 weight% to about 30 weight% monoclinic phase zirconia with the balance cubic and tetragonal phases, based upon the total weight of the zirconia. ~~.~~

40. (Currently Amended) The method of manufacturing zirconia-alumina body of Claim 39, wherein said zirconia-alumina body comprises about 18 weight% to about 25 weight% monoclinic phase zirconia with the balance cubic and tetragonal phases, based upon the total weight of the zirconia. ~~.~~

41. (Currently Amended) The method of manufacturing zirconia-alumina body of Claim 6138, wherein said zirconia-alumina body comprises about 85 to about 93 mole% zirconia, about 3 to about 7 mole% yttrium oxide, and about 3 to about 7 mole% alumina, based upon said total weight of said zirconia-alumina body.

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42. (Previously Presented) A method of manufacturing zirconia-alumina body, comprising:

mixing yttria stabilized zirconia, yttria, and alumina with a solvent to form a mixture;

drying said mixture to form a dried mixture;

disposing said dried mixture adjacent to an unfired alumina body; and

co-firing said dried mixture and said unfired alumina body to form a zirconia-alumina body.

43-50. (Cancelled)

51. (Currently Amended) A method of manufacturing a sensor, comprising:

mixing yttria stabilized zirconia, monoclinic phase zirconia, and alumina with a solvent to form a mixture;

drying said mixture to form an unfired zirconia body;

disposing an electrode on each side of said unfired zirconia body;

connecting each electrode to an electrical lead;

disposing said unfired zirconia body adjacent to an unfired alumina body to form an unfired zirconia-alumina body, wherein one of said electrodes is disposed between said zirconia body and said alumina body; and

co-firing said unfired zirconia-alumina body to form a co-fired zirconia-alumina body comprising about 1 weight% to about 45 weight% monoclinic phase zirconia, based upon a total weight of said zirconia~~, alumina body.~~

52. (Previously Presented) The method of manufacturing a sensor as in Claim 51, wherein said zirconia comprises about 1,000 ppm or lower total impurities, and wherein at least one of said electrodes has a resistivity of about 10 ohm-cm or lower at 800°C in air.

53. (Previously Presented) The method of manufacturing a sensor as in Claim 52, wherein said impurities are selected from the group consisting of silica, sodium, calcium, magnesium, iron, titanium, and chlorine.

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54. (Previously Presented) The method of manufacturing a sensor as in Claim 53, wherein said zirconia comprises about 100 ppm or less of each of silica, sodium, calcium, magnesium, iron, titanium, and chlorine.

55. (Cancelled)

56. (New) The method of manufacturing zirconia-alumina body of Claim 38, wherein said mixture and said alumina body have a sintering mismatch of less than about 5%.

57. (New) The method of manufacturing zirconia-alumina body of Claim 42, wherein said mixture and said alumina body have a sintering mismatch of less than about 5%.

58. (New) The method of manufacturing a sensor as in Claim 51, wherein said mixture and said alumina body have a sintering mismatch of less than about 5%.

59. (New) The method of manufacturing a sensor as in Claim 51, wherein said zirconia-alumina body comprises up to about 95 mole% zirconia, up to about 10 mole% yttrium oxide, and up to about 10 mole% alumina, based upon said total weight of said zirconia-alumina body.

60. (New) The method of manufacturing a sensor as in Claim 59, wherein said zirconia-alumina body comprises about 85 to about 93 mole% zirconia, about 3 to about 7 mole% yttrium oxide, and about 3 to about 7 mole% alumina, based upon said total weight of said zirconia-alumina body.

61. (New) The method of manufacturing zirconia-alumina body of Claim 38, wherein said zirconia-alumina body comprises up to about 95 mole% zirconia, up to about 10 mole% yttrium oxide, and up to about 10 mole% alumina, based upon said total weight of said zirconia-alumina body.

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62. (New) The method of manufacturing zirconia-alumina body of Claim 42, wherein said zirconia-alumina body comprises up to about 95 mole% zirconia, up to about 10 mole% yttrium oxide, and up to about 10 mole% alumina, based upon said total weight of said zirconia-alumina body.

63. (New) The method of manufacturing zirconia-alumina body of Claim 62, wherein said zirconia-alumina body comprises about 85 to about 93 mole% zirconia, about 3 to about 7 mole% yttrium oxide, and about 3 to about 7 mole% alumina, based upon said total weight of said zirconia-alumina body.

64. (New) The method of manufacturing zirconia-alumina body of Claim 38 wherein said zirconia has a total impurity amount of less than about 1,000 ppm.

65. (New) The method of manufacturing zirconia-alumina body of Claim 64, wherein said impurities are selected from the group consisting of silica, sodium, calcium, magnesium, iron, titanium, and chlorine.

66. (New) The method of manufacturing zirconia-alumina body of Claim 65, wherein said zirconia has about 100 ppm or less of each of silica, sodium, calcium, magnesium, iron, titanium, and chlorine.

67. (New) The method of manufacturing zirconia-alumina body of Claim 42, further comprising mixing monoclinic phase zirconia with said yttria stabilized zirconia, said yttria, and said alumina with said solvent to form said mixture.